Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1. (Currently amended) A method of promoting regeneration or survival of dopaminergic neurons in a mammal displaying signs or symptoms of dopaminergic neuronal degeneration, comprising administering to the mammal a therapeutically effective amount of a soluble form of a mammalian NgR1, wherein said soluble form of a mammalian NgR1 is administered directly into the central nervous system.

Claim 2. (Canceled)

Claim 3. (Currently amended) The method of claim [[2]] 1, wherein said soluble form of a mammalian NgR1 is administered directly into the substantia nigra or the striatum.

Claim 4. (Currently amended) The method of claim [[2]] 1, wherein said soluble form of a mammalian NgR1 is administered by bolus injection or chronic infusion.

Claim 5. (Canceled)

Claim 6. (Previously presented) The method of claim 1, wherein the soluble form of a mammalian NgR1 comprises a peptide selected from the group consisting of:

(a) amino acids 26 to 310 of human NgR1 (SEQ ID NO:3) with up to ten conservative amino acid substitutions;

(b) amino acids 26 to 344 of human NgR1 (SEQ ID NO:4) with up to ten conservative amino acid substitutions;

(c) amino acids 27 to 310 of rat NgR1 (SEQ ID NO:5) with up to ten conservative amino acid substitutions; and

(d) amino acids 27 to 344 of rat NgR1 (SEQ ID NO:6) with up to ten conservative amino acid substitutions.

Claims 7-9. (Canceled)

Claim 10. (Previously presented) The method of claim 1, wherein the soluble form of a mammalian NgR1 further comprises a fusion moiety.

Claim 11. (Previously presented) The method of claim 10, wherein the fusion moiety is an immunoglobulin moiety.

Claim 12. (Previously presented) The method of claim 11, wherein the immunoglobulin moiety is an Fc moiety.

Claims 13-18. (Canceled)

Claim 19. (Previously presented) The method of claim 1, wherein the therapeutically effective amount is from 0.001 mg/kg to 10 mg/kg.

Claim 20. (Previously presented) The method of claim 19, wherein the therapeutically effective amount is from 0.01 mg/kg to 1.0 mg/kg.

Claim 21. (Previously presented) The method of claim 20, wherein the therapeutically effective amount is from 0.05 mg/kg to 0.5 mg/kg.

Claim 22. (Previously presented) A method of claim 1, wherein the dopaminergic neuronal degeneration is associated with a disease or disorder selected from the group consisting of Parkinson's disease, multiple system atrophy, striatonigral degeneration, olivopontocerebellar atrophy, Shy-Drager syndrome, motor neuron disease with parkinsonian features, Lewy body dementia, progressive supranuclear palsy, cortical-basal ganglionic degeneration, frontotemporal dementia, Alzheimer's disease with parkinsonism, Wilson disease, Hallervorden-Spatz disease, Chediak-Hagashi disease, SCA-3 spinocerebellar ataxia, X-linked dystonia-parkinsonism (DYT3), Huntington's disease (Westphal variant), prion disease, vascular parkinsonism, cerebral palsy, repeated head trauma, postencephalitic parkinsonism and neurosyphilis.

Claim 23. (Currently amended) A method of treating Parkinson's disease, comprising administering to a mammal a therapeutically effective amount of a soluble

form of a mammalian NgR1, wherein said soluble form of a mammalian NgR1 is administered directly into the central nervous system.

Claim 24. (Currently amended) A method of promoting regeneration or survival of dopaminergic neurons in a mammal displaying signs or symptoms of dopaminergic neuronal degeneration, comprising administering to the mammal a therapeutically effective amount of an antibody or antigen-binding fragment thereof that binds to a murine or human NgR1, wherein said antibody or antigen-binding fragment thereof that binds to a murine or human NgR1 is administered directly into the central nervous system.

Claim 25. (Canceled)

Claim 26. (Currently amended) The method of claim [[25]] 24, wherein said antibody or antigen-binding fragment thereof that binds to a murine or human NgR1 is administered directly into the substantia nigra or the striatum.

Claim 27. (Currently amended) The method of claim [[25]] 24, wherein said antibody or antigen-binding fragment thereof that binds to a murine or human NgR1 is administered by bolus injection or chronic infusion.

Claim 28. (Previously presented) The method of claim 24, wherein the antibody or antigen-binding fragment thereof is a monoclonal antibody selected from the group consisting of:

HB 7E11,

HB 1H2,

HB 3G5,

HB 5B10, and

HB 2F7.

Claim 29. (Previously presented) The method of claim 24, wherein the antibody or antigen-binding fragment thereof binds to a polypeptide bound by a monoclonal antibody produced by a hybridoma selected from the group consisting of:

HB 7E11 (ATCC® accession No. PTA-4587), and

HB 5B10 (ATCC® accession No. PTA-4588)

wherein the polypeptide consists of an amino acid sequence selected from the group consisting of: AAAFTGLTLLEQLDLSDNAQLR (SEQ ID NO: 7); LDLSDNAQLR (SEQ ID NO: 8); LDLSDDAELR (SEQ ID NO: 9); LDLASDNAQLR (SEQ ID NO: 10); LDLASDDAELR (SEQ ID NO: 11); LDALSDNAQLR (SEQ ID NO: 12); LDALSDDAELR (SEQ ID NO: 13); LDLSSDNAQLR (SEQ ID NO: 14); LDLSSDEAELR (SEQ ID NO: 15); DNAQLRVVDPTT (SEQ ID NO: 16); DNAQLR (SEQ ID NO: 17); ADLSDNAQLRVVDPTT (SEQ ID NO: 18); LALSDNAQLRVVDPTT (SEQ ID NO: 19); LDLSDNAALRVVDPTT (SEQ ID NO:

20); LDLSDNAQLHVVDPTT (SEQ ID NO: 21); and LDLSDNAQLAVVDPTT (SEQ ID NO: 22).

Claim 30. (Previously presented) The method of claim 29, wherein said monoclonal antibody is produced by the HB 7E11 hybridoma.

Claim 31. (Previously presented) The method of claim 29, wherein the antibody or antigen-binding fragment thereof is selected from the group consisting of a polyclonal antibody, a monoclonal antibody, a Fab fragment, a Fab' fragment, a $F(ab')_2$ fragment, an Fv fragment, an Fd fragment, a diabody, and a single-chain antibody.

Claim 32. (Previously presented) The method of claim 24, wherein the therapeutically effective amount is from 0.001 mg/kg to 10 mg/kg.

Claim 33. (Previously presented) The method of claim 32, wherein the therapeutically effective amount is from 0.01 mg/kg to 1.0 mg/kg.

Claim 34. (Previously presented) The method of claim 33, wherein the therapeutically effective amount is from 0.05 mg/kg to 0.5 mg/kg.

Claim 35. (Previously presented) The method of claim 24, wherein the dopaminergic neuronal degeneration is associated with a disease or disorder selected from the group consisting of Parkinson's disease, multiple system atrophy, striatonigral

degeneration, olivopontocerebellar atrophy, Shy-Drager syndrome, motor neuron disease with parkinsonian features, Lewy body dementia, progressive supranuclear palsy, cortical-basal ganglionic degeneration, frontotemporal dementia, Alzheimer's disease with parkinsonism, Wilson disease, Hallervorden-Spatz disease, Chediak-Hagashi disease, SCA-3 spinocerebellar ataxia, X-linked dystonia-parkinsonism (DYT3), Huntington's disease (Westphal variant), prion disease, vascular parkinsonism, cerebral palsy, repeated head trauma, postencephalitic parkinsonism and neurosyphilis.

Claim 36. (Currently amended) A method of treating Parkinson's disease, comprising administering to a mammal a therapeutically effective amount of an antibody or antigen-binding fragment thereof that binds to a murine or human NgR1, wherein said antibody or antigen-binding fragment thereof that binds to a murine or human NgR1 is administered directly into the central nervous system.